

Sent via Email.

September 13, 2021

Ms. Jennifer Knoepfle, Ph.D., P.G.
Remedial Project Manager
U.S. EPA Region 5 (SR-6J)
Superfund Division
77 West Jackson Blvd.
Chicago, Illinois 60604

Mr. Brian Conrath
National Priorities List Unit
Federal Sites Remediation Section
Division of Remediation Management
Bureau of Land
Illinois Environmental Protection Agency
1021 N. Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

**Subject: Response to Comments on First Quarter 2021 GMZ Monitoring and System Performance Report
Hamilton Sundstrand Corporation (HSC) Plant 1/2 Facility
Southeast Rockford Groundwater Contamination Superfund Site, Rockford, Illinois (ILD981000417)**

Dear Ms. Knoepfle and Mr. Conrath:

On behalf of Hamilton Sundstrand Corporation (HSC), AECOM Technical Services Inc. (AECOM) has completed this response letter to the United States Environmental Protection Agency (USEPA) June 29, 2021 comment letter regarding the First Quarter 2021 GMZ Monitoring and System Performance Report for the HSC Plant 1/2 Facility in Rockford, Illinois (Site).

Per the direction of USEPA, the subject report will not be resubmitted. Instead, implementation of the actionable comments (as appropriate) will be completed in future monitoring reports.

Comment 1: Please link the bookmarks to the appropriate sections. Currently when one clicks any of the bookmarks there are no links to a particular section or page of the document. For convenience, EPA requests that bookmarks for the tables be include since there are many pages for each table (e.g. scrolling through 56 pages to get to Table 4.6).

Response: Appropriate bookmarks have been included in the Second Quarter 2021 Groundwater Management Zone Monitoring and System Performance Report (Q2 Report).

Comment 2: *A figure, similar to Figure 2, but that also shows the SA9/10 relationship to the HSC property and wells, GMZ 1 and 2 Areas, etc. would be beneficial if included. Potentially a replacement for Figure 1 that shows the entire Southeast Rockford Groundwater Contamination Superfund Site and surrounding area, SA9/10, and HSC property, is another suggestion.*

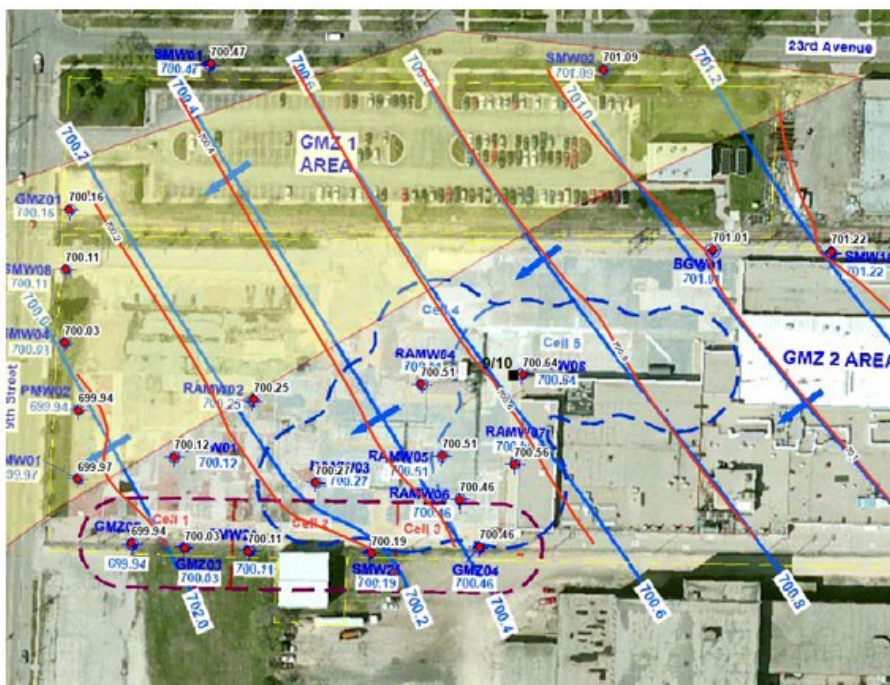
Response: A new figure (see Figure 2 in the Q2 Report) has been added.

Comment 3: *For quarterly (and annual) reports the wells along the western GMZ 1 and 2 boundaries, have been presented as demonstrating stable or decreasing or no trends and that this area appears asymptotic. At this time, EPA does not concur with this conclusion. With respect to detection of exceedances of contaminants of concern (COCs) on western GMZ 1 and 2 boundaries, if the contours shown for the first quarter 2021 are representative of the general water level condition at the HSC property, groundwater flow could move contaminants from sources (identified or not) in the yellow shaded polygon (see figure below) to the wells on the western GMZ Area 1 and 2 boundaries. If a source area does exist upgradient, these wells will likely continue to show exceedances with some regularity, in particular, the “no trend” or “stable” wells, until the source is mitigated.*

It appears from the well sampling data along the southern border of the GMZ 2 Area that the air sparge/soil vapor extraction (AS/SVE) system has removed a significant portion of the contaminants from the Phase 1 and Phase 2 areas of influence. However, the AS/SVE system was not intended to affect the area shaded in yellow (see figure below) which potentially contains unknown source areas or known source areas that have not been sufficiently mitigated and would be still leaching VOCs to the groundwater system. This seems to be the case as depicted in Figure 4 and Figure 5 of this report (western GMZ Area 1 and 2 boundary wells).

One such potential source is the OSA where there are known tetrachloroethene (PCE) concentrations at depth that exceed the preliminary remediation goal (PRG) for soil (60 ug/kg, soil component for protection of groundwater) within the 26 to 30 foot below ground surface (bgs) interval, where groundwater levels are present and have been recorded, and the OSA is upgradient of GMZ01 and SMW08. There are also same order of magnitude concentrations of PCE (40-60 ug/kg), although less than the PRG, as deep as 32 feet bgs in the OSA.

It will also be telling if the AS/SVE system is impacting PMW01 along the western boundary. The upcoming quarterly event results during system shutdown would provide information for further evaluation of this concept.



Response: Comment noted.

Comment 4: **Page 2. Paragraph 3. Sentence 2.** Please provide the rationale or a citation regarding why the implemented remedy was targeted to address areas with leachate concentrations that were two or more orders of magnitude greater than the PRGs.

Response: The citation is provided on page 2 of the Q2 Report: Second Paragraph. Second Sentence.

Comment 5: **Page 2. Paragraph 5.** Adding the COCs that exceed the PRGs, and the PRG criteria for the COC(s) in this table/text would help the reader understand the increase/decrease relative to the PRGs for these compounds.

Response: The table and text on page 2 of the Q2 Report provide the requested information.

Comment 6: **Page2. Paragraph 6. Sentence 1.** Add the 1, 4-dioxane screening criteria value to this sentence. Also add a corresponding figure presenting 1,4 dioxane results.

Response: The table on page 2 and Figure 5 of the Q2 Report present exceedances of 1,4-dioxane.

Comment 7: **Page 2. Paragraph 6. Last Sentence.** Remove the sentence that 1,4-dioxane will not be included as a COC in future monitoring events. The understanding per the January 12, 2021 letter from EPA was that 1,4-dioxane sampling would be conducted “for at least one monitoring cycle” at SA 9/10 and that “EPA will then determine whether to continue 1,4-dioxane analyses after evaluation of the data”. As of the most recent May 11, 2021 letter, and based on the results from this report, EPA required that HSC continue monitoring 1,4-dioxane for at least 4 quarters.

Response: Sentence was not included in the Q2 Report.

Comment 8: **Page3. Paragraph 6.** “Monitoring well data along the southern Facility property boundary since 2016, which consists of 19 consecutive quarterly leachate sampling events, or over 4 plus years of monitoring, the sample results have been below PRGs.” is a bit unclear. Please reword for clarity.

Response: The text on page 4 of the Q2 Report has been reworded for clarity.

Comment 9: **Page 3. Paragraph 6.** The phrase “with minor exceptions” is subjective and vague, it appears to minimize the importance of exceeding the standard. It does not adequately describe the number of times the PRGs were exceeded during that period. The author’s interpretation of minor exceptions, may be different from the reader’s interpretation, please reword.

Response: The text on page 4 of the Q2 Report has been reworded for clarity.

Comment 10: **Table 1.** Add depths and the screened intervals to this table. This would help interpret the water levels and better understand the distribution of VOCs in the wells. Are these wells sampling near the top of the water table or further down in the water column?

Response: Table 1 in the Q2 Report includes the screen intervals and a note has been added that sample collection is at the approximate screen interval mid-point.

Comment 11: **Table 2 and Table 3.** In the footnotes “0.50 U Laboratory estimated quantitation limit exceeded standard.” This should be the ‘J’ qualifier code because ‘J’ indicates an estimated value from the lab whereas ‘U’ indicates that the compound was not detected.

Response: The footnote in Table 2 and Table 3 of the Q2 Report has been revised as appropriate.

Comment 12: **Table 4.** In the footnotes “MW molecular weight values from the U.S. National Library” seems truncated or incomplete, please modify.

Response: The footnote in Table 4 of the Q2 Report has been revised as appropriate.

Comment 13: **Figure 3.** Overall, the water level contour lines are mostly appropriate as drawn except as follows:

- a. 701.4 ft contour: There is not enough data to adequately define this area and should be dashed as shown below.



Response: Comment noted.

- b. Contour extents that go beyond the limits of the data or are not sufficiently constrained by measured data should be dashed (e.g. 701.2, 700.8, 700.6, 700.2, 700.0).

Response: Comment noted.

c. South end of the 700.0 contour says 702.0, please correct.

Response: Comment noted. The figure in the Q2 Report is based on leachate elevation data collected during the second quarter monitoring event.

*Comment 14: **Figure 7 and 8.** The rate would be easier to interpret if the y-scale was logarithmic.*

Response: Figure 8 and 9 in the Q2 Report have been graphed using a logarithmic y-scale.

*Comment 15: **Figure 9.** This figure shows approximately 1,900 pounds of VOCs removed. How does this compare to the estimated mass that was "spilled"? Is that number available?*

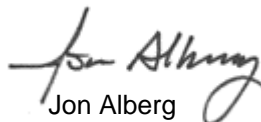
Response: A note has been added to Figure 10 in the Q2 report that the estimated mass released is not known.

Please contact Peter Hollatz with any questions.

Prepared by:



Peter Hollatz, P.E.
Project Manager
peter.hollatz@aecom.com
(919) 461-1194



Jon Alberg
Senior Principal
jon.alberg@aecom.com
(715) 531-7010

cc: John Wolski, Raytheon Technologies Corporation